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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,482	07/24/2003	Jon O. Reynolds	ITW7510.052	1481

33647 7590 09/08/2004

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EXAMINER

SHAW, CLIFFORD C

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,482

Applicant(s)

REYNOLDS ET AL.

Examiner

Clifford C Shaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/24/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0725 and 1010</u> . | 6) <input type="checkbox"/> Other: ____. |

Detailed Action

1.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2.) Claims 1, 2, 9, 10, 12, 19, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent application no. 0575082A2 taken with Bulwidas, Jr. (4,227,066, cited by applicant). Figure 6 and the discussion thereof in the European patent application no. 0575082A2 disclose a welding system with features claimed including: a power source 3; electrode holder 53; transmitter 6 that when activated emits signals to control the welding process; receiver 4 that receives signals from the transmitter, which signals are coupled to and transmitted over the welding cable 2. The claims differ from the European patent application no. 0575082A2 in calling for the trigger associated with the transmitter to be on the electrode holder. This difference does not patentably distinguish over the prior art. The European patent application no. 0575082A2 does not explicitly disclose how the transmitter 6 is configured with respect to the welding torch. Without any explicit teaching, it would have been obvious at the time applicant's invention was made to have positioned element 6 with respect to torch 53 in any conventional fashion. In particular, it would have been obvious to have mounted transmitter 6 and its associated triggers on welding torch 53, the motivation being the teachings of Bulwidas, Jr. (4,227,066) that it is advantageous to mount remote control units on a welding

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torch (see element 15 mounted on torch handle 12 in Bulwidas, Jr. (4,227,066)). In regard to the “kit” limitation of claim 25, it is considered obvious that the various modules of the control system would exist in an independent form before they were combined into the overall system. This independent form would constitute a “kit”, thereby satisfying the claim.

3.) Claims 3, 5, 13-18, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent application no. 0575082A2 taken with Bulwidas, Jr. (4,227,066) as applied to claims 1, 2, 9, 10, 12, 19, and 25 above, and further in view of Tunnell et al. (4,641,292, cited by applicant). The only aspect of the claims to which the rejection above does not apply is the provision for control of particular power supply output modes. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used the system of the European patent application no. 0575082A2 to control any well known power supply modes that are conventionally controlled by remote control units. In particular, it would have been obvious to have controlled the modes set forth in the claims, the motivation being the teachings of Tunnell et al. (4,641,292) that such are advantageously controlled by a remote control unit (see the power supply modes in column 9 of Tunnell et al. (4,641,292) and especially note the start/stop power supply modes and the increase/decrease current or voltage power supply modes, all of these modes being controlled by the remote control unit).

4.) Claims 3, 4, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent application no. 0575082A2 taken with Bulwidas, Jr. (4,227,066) as applied to

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claims 1, 2, 9, 10, 12, 19, and 25 above, and further in view of Stringer (4,247,752). The only aspect of the claims to which the rejection above does not apply is the provision for control of constant current or constant voltage output modes and control of the power supply based on sensed voltage and current . This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used any well known power supply in Bulwidas, Jr. (4,227,066), including one with the features claimed, the motivation being the teachings of Stringer (4,247,752) that such are advantageous (see the abstract and figure 1 of Stringer (4,247,752)).

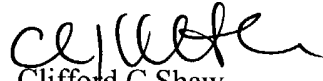
5.) Claims 6-8 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent application no. 0575082A2 taken with Bulwidas, Jr. (4,227,066) as applied to claims 1, 2, 9, 10, 12, 19, and 25 above, and further in view of Brunner et al. (6,570,132, cited by applicant). The only aspect of the claims to which the rejection above does not apply is the provision for control based on a pulse width modulation scheme. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used any well known data modulation approach in the system of the European patent application no. 0575082A2. In particular, it would have been obvious to have used a pulse width modulation scheme, the motivation being the teachings of Brunner et al. (6,570,132) that such is advantageous for remote control of a welding system (see figures 3 and 4 and the discussion in columns 9 and 10 of Brunner et al. (6,570,132)).

6.) Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent application no. 0575082A2 taken with Bulwidas, Jr. (4,227,066) as applied to claims 1, 2, 9, 10, 12, 19, and 25 above, and further in view of Tabata et al. (5,043,557). The only aspect of the claims to which the rejection above does not apply is the provision for control of the power supply based on voltage feedback and based on accommodation for cable losses . These differences do not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have provided the power supply of Bulwidas, Jr. (4,227,066) with the control features claimed, the motivation being the teachings of Tabata et al. (5,043,557) that such control approaches are advantageous for an arc welding power supply (see the abstract and the discussion of figure 1 in Tabata et al. (5,043,557) and note the voltage control implemented by elements 6 and 9 and the cable compensation as discussed in the abstract).

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Clifford C Shaw
Primary Examiner
Art Unit 1725

September 7, 2004